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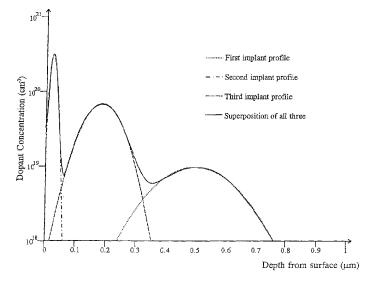
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[Continued on next page]

(54) Title: ELECTRO-OPTIC DEVICES



(57) Abstract: A method of manufacturing an electro-optic device is described, comprising the steps of applying to a semiconductor a first dose of a dopant impurity to a first depth, and further applying, by implantation, a second dose of dopant impurity at an energy sufficient to implant the dopant to a second depth, the second depth being greater than the first depth. Both doses can be applied by implantation. The second dose can thus extend to the insulating layer of an SOI structure whilst the first offers a good ohmic contact and increased lateral injection efficiency. A third dose of dopant impurity can by applied between the first and second. The application also relates to an electro-optic device comprising a doped region in which the concentration profile of dopant with depth comprises at least one point of inflexion, a minima, and/or a maxima between a pair of minima.



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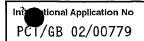
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 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, IBM-TDB, WPI Data, INSPEC, COMPENDEX

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